UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,735	12/11/2003	Ulf Fildebrandt	13913-140001 / 2003P00458	9512

			EXAMINER
22852	7590	11/15/2006	MORRISON, JAY A

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   Claims 1-21 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Liston et al. ('Liston' hereinafter) (Publication Number 20050065951) in view of Ng et al.

('Ng' hereinafter) (Patent Number 6,360,223).

As per claim 1, Liston teaches

"receive a specification of one or more controllers, each controller having at least

one associated data structure of data elements, each data structure being associated

with exactly one controller, and one or more data mappings, each data mapping

specifying a data source for a data element, each data mapping being a context

mapping or a model mapping, each context mapping binding the data element to

another data element, each model mapping specifying a model and a supply function,

the supply function being operable to derive a value of the data element from the model"

(model-view-controller, paragraph [0009]);

"derive one or more data dependency relationships from the data mappings,

each data dependency relationship being directed from a controller to one other

controller or to one model, one data dependency relationship being derived whenever

there is at least one data mapping between the controller and the other controller or the

model" (paragraph [0009] and [0042]);

Liston does not explicitly indicate "and visualize the data dependency

relationships by displaying a link for each of one or more data dependency

relationships, each link showing a direction of data dependency".

However, Ng discloses "and visualize the data dependency relationships by

displaying a link for each of one or more data dependency relationships, each link

showing a direction of data dependency" (column 9, lines 37-57).

It would have been obvious to one of ordinary skill in the art to combine Liston

and Ng because using the steps of "and visualize the data dependency relationships by

displaying a link for each of one or more data dependency relationships, each link

showing a direction of data dependency" would have given those skilled in the art the

tools to improve the invention by having views of the mappings. This gives the user the

advantage of being able to visualize the relationships that exist.

As per claim 2, Liston teaches

"the data structure is a tree" (paragraph [0052]).

As per claim 3, Liston teaches

"the instructions to receive a specification comprise instructions to receive a

specification of a component encapsulating the controllers and including the mappings,

and wherein the controllers comprise at least one interface controller and at least one

view controller" (paragraph [0009] and [0042]).

As per claim 4, Liston teaches

"the controllers further comprise a configuration controller, a component

controller, or a custom controller" (paragraph [0009] and [0042]).

As per claim 5,

Liston does not explicitly indicate "receive user input editing a first link; and

modify the data dependency relationship specified by the first link in accordance with

the user input, the data dependency relationship being modified by modifying the data

mappings, wherein the modified data mappings correspond to the user input".

However, Ng discloses "receive user input editing a first link; and modify the data

dependency relationship specified by the first link in accordance with the user input, the

data dependency relationship being modified by modifying the data mappings, wherein

the modified data mappings correspond to the user input" (column 9, lines 37-57).

It would have been obvious to one of ordinary skill in the art to combine Liston

and Ng because using the steps of "receive user input editing a first link; and modify the

data dependency relationship specified by the first link in accordance with the user

input, the data dependency relationship being modified by modifying the data mappings,

wherein the modified data mappings correspond to the user input" would have given

those skilled in the art the tools to improve the invention by having views of the

mappings. This gives the user the advantage of being able to visualize the relationships

that exist.

As per claim 6, Liston teaches

"the first and second data source each being one of the controllers or models"

(paragraph [0009]).

Liston does not explicitly indicate "the first link has a source end, the source end

specifying the source of data for the data dependency relationship, and the instructions

to receive the user input comprise instructions to: receive user input moving the source

end of the first link from a first data source to a second data source".

However, Ng discloses "the first link has a source end, the source end specifying

the source of data for the data dependency relationship, and the instructions to receive

the user input comprise instructions to: receive user input moving the source end of the

first link from a first data source to a second data source" (column 9, lines 37-57).

It would have been obvious to one of ordinary skill in the art to combine Liston

and Ng because using the steps of "the first link has a source end, the source end

specifying the source of data for the data dependency relationship, and the instructions

to receive the user input comprise instructions to: receive user input moving the source

end of the first link from a first data source to a second data source" would have given those skilled in the art the tools to improve the invention by having views of the mappings. This gives the user the advantage of being able to visualize the relationships that exist.

As per claim 7,

Liston does not explicitly indicate "the instructions to receive the user input cause the data processing equipment to: receive user input changing the direction of the data dependency relationship for the first link".

However, Ng discloses "the instructions to receive the user input cause the data processing equipment to: receive user input changing the direction of the data dependency relationship for the first link" (column 9, lines 37-57).

It would have been obvious to one of ordinary skill in the art to combine Liston and Ng because using the steps of "the instructions to receive the user input cause the data processing equipment to: receive user input changing the direction of the data dependency relationship for the first link" would have given those skilled in the art the tools to improve the invention by having views of the mappings. This gives the user the advantage of being able to visualize the relationships that exist.

As per claim 8, Liston teaches

"receive user input requesting a display of a detail view of a second link, the second link having a source and a destination" (enter input fields, paragraph [0152]);

"and respond to the user input by displaying all the data mappings that have the same source and destination as the second link" (finds relationset, paragraph [0132]).

As per claim 9, Liston teaches

"receive user input to filter the displayed links using a filter" (enter input fields, paragraph [0152]);

"and display only data dependency relationships satisfying the filter" (finds relationset, paragraph [0132]).

As per claim 10, Liston teaches

"the filter specifies all data dependency relationships having selected models or controllers as the source" (finds relationset, paragraph [0132]).

As per claim 11, Liston teaches

"the filter specifies all data dependency relationships having a selected controller as the source or the destination, or having a selected model as the source" (finds relationset, paragraph [0132]).

As per claim 12, Liston teaches

"receive user input to filter the data mappings using a filter" (enter input fields, paragraph [0152]);

"derive one or more filtered data dependency relationships from the data

mappings satisfying the filter" (finds relationset, paragraph [0132]);

"and visualize the filtered data dependency relationships" (visualize related data,

paragraph [0055]).

As per claim 13, Liston teaches

"the filter specifies all data mappings having selected models or controllers as the

data source" (finds relationset, paragraph [0132]).

As per claim 14, Liston teaches

"the filter specifies all data mappings having a selected controller or model as the

data source, and all data mappings specifying a data source for the selected controller"

(finds relationset, paragraph [0132]).

As per claim 15, Liston teaches

"means for receiving a specification of a component, wherein the component

encapsulates one or more controllers, each controller having at least one associated

data structure of data elements, each data structure being associated with exactly one

controller, the component including one or more data mappings, each data mapping

specifying a data source for a data element, each data mapping being a context

mapping or a model mapping, each context mapping binding the data element to

another data element, each model mapping specifying a model and a supply function,

the supply function being operable to derive a value of the data element from the model" (model-view-controller, paragraph [0009]);

"means for deriving one or more data dependency relationships from the data mappings, each data dependency relationship being directed from a controller to one other controller or to one model, one data dependency relationship being derived whenever there is at least one data mapping between the controller and the other controller or the model" (model-view-controller, paragraph [0009] and [0042]);

Liston does not explicitly indicate "and means for visualizing the data dependency relationships by displaying a link for each of one or more data dependency relationships, each link showing a direction of data dependency".

However, Ng discloses "and means for visualizing the data dependency relationships by displaying a link for each of one or more data dependency relationships, each link showing a direction of data dependency" (column 9, lines 37-57).

It would have been obvious to one of ordinary skill in the art to combine Liston and Ng because using the steps of "and means for visualizing the data dependency relationships by displaying a link for each of one or more data dependency relationships, each link showing a direction of data dependency" would have given those skilled in the art the tools to improve the invention by having views of the mappings. This gives the user the advantage of being able to visualize the relationships that exist.

As per claim 16,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 5 and is similarly rejected.

As per claim 17,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 8 and is similarly rejected.

As per claim 18,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 15 and is similarly rejected.

As per claim 19,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 5 and is similarly rejected.

As per claim 20,

This claim is rejected on grounds corresponding to the arguments given above

for rejected claim 8 and is similarly rejected.

As per claim 21, <u>Liston</u> teaches

"receive a specification of one or more controllers, each controller having at least one associated data structure of data elements, each data structure being associated with exactly one controller, and one or more data mappings, each data mapping specifying a data source for a data element" (model-view-controller, paragraph [0009]);

Liston does not explicitly indicate "display a link for each of one or more data dependency relationships, each data dependency relationship being directed from a controller to one other controller or to one model, each data dependency relationship indicating that there is at least one data mapping between the controller and the other controller or the model and representing all the data mappings in the same direction between the controller and the other control or the model, each link showing the direction of data dependency; receive user input editing a first link; and modify the data mappings represented by the data dependency relationship specified by the first link in accordance with the user input".

However, Ng disclose "display a link for each of one or more data dependency relationships, each data dependency relationship being directed from a controller to one other controller or to one model, each data dependency relationship indicating that there is at least one data mapping between the controller and the other controller or the model and representing all the data mappings in the same direction between the controller and the other control or the model, each link showing the direction of data dependency; receive user input editing a first link; and modify the data mappings represented by the data dependency relationship specified by the first link in accordance with the user input" (column 9, lines 37-57).

It would have been obvious to one of ordinary skill in the art to combine <u>Liston</u>

and <u>Ng</u> because using the steps of "display a link for each of one or more data

dependency relationships, each data dependency relationship being directed from a

controller to one other controller or to one model, each data dependency relationship

indicating that there is at least one data mapping between the controller and the other

controller or the model and representing all the data mappings in the same direction

between the controller and the other control or the model, each link showing the

direction of data dependency; receive user input editing a first link; and modify the data

mappings represented by the data dependency relationship specified by the first link in

accordance with the user input" would have given those skilled in the art the tools to

improve the invention by having views of the mappings. This gives the user the

advantage of being able to visualize the relationships that exist.

Response to Arguments

4.   Applicant's arguments filed 8/30/06 have been fully considered but they are not

persuasive.

With regards to Applicant's argument that <u>Liston</u> in view of <u>Ng</u> does not disclose

"each controller having at least one associated data structure of data elements", it is

noted that <u>Liston</u> discloses controllers and associated models (paragraph [0009]) and

further defines data elements stored in data structures as data models (paragraphs

[0042]). Therefore <u>Liston</u> discloses the limitation.

With regards to Applicant's argument that <u>Liston</u> in view of <u>Ng</u> does not disclose "each data mapping specifying a data source for a data element, each data mapping being a context mapping or a model mapping, each context mapping binding the data element to another data element, each model mapping specifying a model and a supply function, the supply function being operable to derive a value of the data element from the model", it is noted that <u>Liston</u> discloses a mapping of data elements in data structures in data model and the data elements from ADT objects such as volume and surface area being the claimed supply function (paragraph [0042]). Therefore <u>Liston</u> discloses the limitation.

With regards to Applicant's argument that <u>Liston</u> in view of <u>Ng</u> does not disclose "each data dependency relationship being directed from a controller to one other controller or to one model, one data dependency relationship being derived whenever there is at least one data mapping between the controller and the other controller or the model", it is noted that <u>Liston</u> discloses Model-View-Controller where a data dependency relationship exists between a controller and a model (paragraph [0009]). Therefore <u>Liston</u> discloses the limitation.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

The prior art made of record, listed on form PTO-892, and not relied upon is

considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-

7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free).

TIM VO
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